

An Roinn Oideachais agus Scileanna

Department of Education and Skills

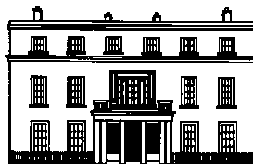
**Subject Inspection of Science and Biology
REPORT**

Skerries Community College

Skerries, Co Dublin

Roll number: 76078Q

Date of inspection: 11 March 2015



**AN ROINN | DEPARTMENT OF
OIDEACHAIS | EDUCATION
AGUS SCILEANNA | AND SKILLS**

REPORT
ON
THE QUALITY OF LEARNING AND TEACHING IN SCIENCE AND BIOLOGY

INFORMATION ON THE INSPECTION

Dates of inspection: 10 and 11 March 2014	
Inspection activities undertaken <ul style="list-style-type: none">• Review of relevant documents• Discussion with principal, deputy principal and teachers• Interaction with students	<ul style="list-style-type: none">• Observation of teaching and learning during 13 lessons (5 double and three single periods)• Examination of students' work• Feedback to principal, deputy principal and teachers

MAIN FINDINGS

- The quality of teaching and learning ranged from good to very good with some excellent practices observed.
- Students contributed well to the lessons and displayed a good understanding of the concepts and facts taught.
- Good practices in checking and reinforcing learning were evident and excellent practices were observed in group work, practical work and, in some lessons, formative feedback to students on their work.
- In many lessons, teaching was enthusiastic and students displayed clear enjoyment of the lessons.
- The school has five laboratories which are clean, bright and well maintained.
- The science team are highly committed to the teaching of the subject in the school.

MAIN RECOMMENDATIONS

- The science department should share and model some of the excellent practices in teaching and learning observed during this evaluation as well as discuss and share best questioning practices.
 - Planning documentation should include programmes of study which outline the learning outcomes linked to appropriate methodologies and resources.
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INTRODUCTION

Skerries Community College operates under the auspices of the Dublin and Dun Laoghaire Education and Training Board (DDLETB). It caters for a total of 889 students and offers the Junior Certificate, Leaving Certificate and an optional Transition Year (TY).

TEACHING AND LEARNING

- The quality of teaching and learning ranged from good to excellent. Teachers had planned meticulously and this resulted in well-structured and well-focused lessons. All lessons began with a roll call followed by correction of homework and, in some instances, recapitulation of previous learning.
- All teacher instruction was clear and concise. Many lessons were characterised by enthusiastic teaching and students displayed clear enjoyment of the lesson. The learning outcomes were generally discussed with students at the outset of lessons and this good practice gave lessons a clear focus. In many lessons, teachers returned to the learning outcomes at the conclusion in order to consolidate learning and all teachers should include this in their practice.
- A good range of question types was utilised. Best practice was noted where teachers included a number of challenging higher-order questions and allocated appropriate wait-time. This style of questioning should be used more widely in the science department as it challenges students to think deeply about their learning and provides a good means of teacher assessment.
- Students showed a good understanding of the concepts and facts taught. They contributed well to lessons and participated well in discussions. Where practical work was observed, students worked in small groups with good attention to health and safety procedures. Activities were well organised and well managed. Some practical lessons incorporated an investigative approach where there was good emphasis on the scientific method, fair testing and making predictions; these are excellent practices.
- Good use of information communication technology (ICT) including interactive presentations, animations and video clips helped to clarify and enhance complex concepts.
- Students' literacy skills were developed through the use of key words and subject-specific terminology. Opportunities to develop students' numeracy were exploited in calculations of work and power while other lessons included measurement and the tabulation of results.
- Group work was evident in some lessons. Excellent practice was observed where the task was clear, group members were allocated specific jobs and the group adopted a focused approach to the task. Such practice could be used more widely among the science team.
- Assessment for learning practices, such as the use of mini-white boards and think, pair, share, were used appropriately. There were some excellent examples of the provision of constructive feedback to students on both their written work and assessment tests. More widespread use of this practice is encouraged.
- The enthusiastic approach of the teachers was very effective in maintaining students' interest in the lesson activities. The teachers set high expectations for their students. The science team should share and model some of the excellent practices observed in teaching and learning during this evaluation.

SUBJECT PROVISION AND WHOLE SCHOOL SUPPORT

- The sciences are well supported in the school and are timetabled appropriately. Senior management is very supportive of and facilitates continuing professional development (CPD) of teachers at whole-staff level and at subject-department level.
- There are five laboratories in the school which are clean, bright and well maintained. All have adjacent well-organised preparation areas and chemical stores. Boxed kits have been developed for mandatory practical work and chemicals are stored appropriately. The science department benefits from the services of a laboratory technician.
- The teachers have created a stimulating learning environment in the laboratories with vibrant displays of students' work, key words and subject-specific terminology.

PLANNING AND PREPARATION

- The science team works in a highly committed and dedicated manner. A science co-ordinator is in place and this position is rotated on an annual basis. Minutes of subject department meetings indicate that there is a proactive and organised approach to subject planning.
- The subject department plan gives a good overview of how Science is organised in the school. Plans outline the long-term curriculum content for each year group and these should be used as the basis for more detailed programmes of study which are based on learning outcomes and linked to appropriate methodologies and resources. It is good to note that the practice of sharing resources through an online hub has begun; this will be a valuable tool in progressing the programmes of study.
- Student achievement in the certificate examinations has been discussed and analysed. Details of action planning arising from these discussions and analyses should now be included in the science department planning folder.
- The science team has engaged recently with the process of self evaluation and self reflection with a view to extending best practice in teaching and learning. This is highly commendable. In order to promote this good practice further, the science team should share good examples of teaching and learning at team meetings and consider adopting the practice of peer observation.

The draft findings and recommendations arising out of this evaluation were discussed with the principal, deputy principal and subject teachers at the conclusion of the evaluation. The board of management was given an opportunity to comment in writing on the findings and recommendations of the report, and the response of the board will be found in the appendix of this report.

Appendix

SCHOOL RESPONSE TO THE REPORT

Submitted by the Board of Management

Area 1: Observations on the content of the inspection report

The Board of Management of Skerries Community College welcomes the report and the positive endorsement by the Inspector of the quality of teaching and learning in the Science and Biology Department. The Board is particularly pleased that the enthusiastic and committed approach of the teachers has created an environment where students are being given the opportunity of fulfilling their potential.

Area 2: Follow-up actions planned or undertaken since the completion of the inspection activity to implement the findings and recommendations of the inspection

Teachers are continuing to collaborate and share best practise.